AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-24. (Canceled)

25. (Currently Amended) A method for estimating a field received from at least one source of electromagnetic field, the method comprising:

defining a propagation model for estimating the field received from the at least one source of electromagnetic field at a determined position of a territory, wherein the propagation model estimates the field received from the at least one source of electromagnetic field without measuring the field;

modifying the propagation model according to topology characteristics of the at least one source of electromagnetic field; and

using the modified propagation model to estimate the field received from the at least one source of electromagnetic field at the determined position of the territory.

26. (Previously Presented) The method as claimed in claim 25, wherein modifying the propagation model and using the modified propagation model to estimate the field further comprise:

defining a plurality of propagation models each configured to estimate the electromagnetic field received from the one or more electromagnetic field sources;

identifying at least one parameter corresponding to said topologic characteristics of the one or more electromagnetic field sources, said at least one parameter having a range of variability;

subdividing said range of variability of said at least one parameter into a plurality of intervals, each interval in the plurality of intervals being associated with a different propagation model in the plurality of propagation models;

selecting one of the plurality of propagation models based on a value of the at least one parameter; and

using the selected propagation model to estimate the electromagnetic field at the determined position of the territory.

27. (Previously Presented) The method as claimed in claim 25, further comprising:

identifying at least one parameter identifying said topologic characteristics; and

estimating said field at the determined position by using a single propagation model, said single propagation model being modified in parametric fashion as a function of the value of said at least one parameter identifying said topologic characteristics.

28. (Previously Presented) A method as claimed in claim 27, wherein said single propagation model is of the type

$$L_p = 10 \bullet \log_{10}\left[\left(\frac{4\pi R}{\lambda}\right)^n\right]$$

where L_p is the attenuation coefficient, R is the distance between said determined position and said at least one source of electromagnetic field, and λ is the wavelength of said electromagnetic field and n is an exponent function of said parameter identifying the topologic characteristics of said network.

29. (Previously Presented) The method as claimed in claim 27, wherein said single propagation model is a function of an index (n) linked to said at least one parameter (Δ) by a relationship of the type

$$n=A-B\bullet\log(d\_net),$$

where n is said index, $d\_net=\Delta$ is said parameter identifying the topologic characteristics of said network, and A and B are scaling constants.

30. (Previously Presented) The method as claimed in claim 25, applied to a cellular communication network, comprising the step of modifying said propagation model according to a parameter identifying the density of the cells of said cellular network.

31. (Previously Presented) The method as claimed in claim 25, applied to a cellular communication network, comprising the step of modifying said propagation model according to a parameter identifying the distance of said determined position with respect to the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position.

32. (Previously Presented) The method as claimed in claim 31, comprising the steps of:

associating to each cell of said cellular network a reference distance representing the distribution of the sources of electromagnetic field of said plurality of sources of electromagnetic field;

associating to said determined position a cell distance identifying the distance between said determined position and the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position; and

identifying said parameter which identifies the topologic characteristics of said network as the greater value between said cell distance and a multiple of said reference distance.

33. (Currently Amended) A system for estimating a field received from at least one source of electromagnetic field, the system comprising at least one processing unit configured to estimate said field at a determined position of a territory using a propagation model that is modifiable according to topologic characteristics of the at least one source of electromagnetic field, the at least one processing unit configured to:

modify the propagation model according to the topology characteristics of the at least one source of electromagnetic field; and

use the modified propagation model to estimate the field received from the at least one source of electromagnetic field at the determined position of the territory,

wherein the at least one processing unit estimates the field without measuring the field.

34. (Previously Presented) The system as claimed in claim 33, wherein said at least one processing unit is further configured to:

identify at least one parameter identifying said topologic characteristics, said at least one parameter having a range of variability;

subdivide said range of variability of said at least one parameter into a plurality of intervals, each interval in the plurality of different intervals being associated with a different propagation model;

select a propagation model based on a value of the at least one parameter; and

use the selected propagation model to estimate the field at the determined position of the territory.

35. (Previously Presented) The system as claimed in claim 33, wherein said at least one processing unit is further configured to:

identify at least one parameter identifying said topologic characteristics, and

estimate said field at the determined position by using a single propagation model, said single propagation model being modified in parametric fashion according to the value of said at least one parameter identifying said topologic characteristics.

36. (Previously Presented) The system as claimed in claim 35, wherein said single propagation model is of the type

$$L_p = 10 \bullet \log_{10}\left[\left(\frac{4\pi R}{\lambda}\right)^n\right]$$

where L_p is the attenuation coefficient, R is the distance between said determined position and said at least a source of electromagnetic field and λ is the wavelength of said electromagnetic field and n is an exponent function of said parameter identifying the topologic characteristics of said network.

37. (Previously Presented) The system as claimed in claim 35, wherein said single propagation model is a function of an index (n) linked to said at least one parameter (Δ) by a relationship of the type

n=A-B.log(d_net),

where n is said index, d_net=Δ is said parameter identifying the topologic characteristics of said network, and A and B are scaling constants.

38. (Previously Presented) The system as claimed in claim 33, associated with a cellular communication network wherein said at least one processing unit is configured to modify said propagation model according to a parameter identifying the cell density of said cellular network.

39. (Previously Presented) The system as claimed in claim 33, associated with a cellular communication network wherein said at least one processing unit is configured to modify said propagation model according to a parameter (Δ) identifying the distance of said determined position from the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position.

40. (Previously Presented) The system as claimed in claim 39, wherein said at least one processing unit is configured to:

associate to each cell of said cellular network a reference distance representing the distribution of the sources of electromagnetic field of said plurality of sources of electromagnetic field,

associate to said determined position a cell distance identifying the distance between said determined position and the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position; and

identify said parameter (Δ) identifying the topologic characteristics of said network as the greater value between said cell distance and a multiple of said reference distance.

41. (Currently Amended) A communication network incorporating a system for estimating a field received from at least one source of electromagnetic field, the system comprising at least one processing unit configured to estimate said field at a determined position of a territory using a propagation model that is modifiable according to topologic characteristics of the at least one source of electromagnetic field, the at least one processing unit configured to:

modify the propagation model according to the topology characteristics of the at least one source of electromagnetic field; and

use the modified propagation model to estimate the field received from the at least one source of electromagnetic field at the determined position of the territory.

wherein the at least one processing unit estimates the field without measuring the field.

42. (Previously Presented) The communication network as claimed in claim 41, wherein the network is for mobile communications.

43. (Canceled)

44. (Currently Amended) A communication network terminal comprising a processing unit configured to implement a method for estimating a field received from at least one source of electromagnetic field, the method comprising:

defining a propagation model for estimating the field received from the at least one source of electromagnetic field at a determined position of a territory, wherein the propagation model estimates the field received from the at least one source of electromagnetic field without measuring the field;

modifying the propagation model according to topology characteristics of the at least one source of electromagnetic field; and

using the modified propagation model to estimate the field received from the at least one source of electromagnetic field at the determined position of the territory.

45. (Previously Presented) The method as claimed in claim 25, wherein the method is used to estimate the field for simulating a mobile radio network able to use a simulation of the physical layer of the network.

46. (Previously Presented) The method as claimed in claim 25, wherein the method is used to estimate the field for planning a mobile radio network.

47. (Previously Presented) The method as claimed in claim 25, wherein the method is used to estimate the field for locating mobile terminals in a mobile radio network.

48. (Currently Amended) A computer readable medium storing instructions for execution on at least one electronic computer, the instructions comprising portions of software code capable of implementing a method for estimating a field received from at least one source of electromagnetic field, the method comprising:

defining a propagation model for estimating the field received from the at least one source of electromagnetic field at a determined position of a territory, wherein the propagation model estimates the field received from the at least one source of electromagnetic field without measuring the field;

modifying the propagation model according to topology characteristics of the at least one source of electromagnetic field; and

using the modified propagation model to estimate the field received from the at least one source of electromagnetic field at the determined position of the territory.